



# Afridev Casing Pipe Disassembly

Repair the casing pipe on an Afridev water pump.

Written By: Jake Devincenzi



## INTRODUCTION

Use this guide to lift the casing pipe of an Afridev pump out of the pump in order to repair a broken or damaged segment of the pipe.

### TOOLS:

- **Socket Wrench (1)**
- **24mm Wrench (1)**
- **19 mm crescent wrench (1)**
- **T-Handle (1)**

## Step 1 — Head



- Assemble the required tools, including the Afridev tool and crescent wrenches.

## Step 2



- Perform a water test on the pump, by raising and lowering the handle a full 40 strokes. A properly performing pump will yield greater than 10 liters.

## Step 3



- Loosen the bolt on front of the face plate with the Afridev tool.
- Remove the plate from the pump by lifting it straight up.

## Step 4 — Axe and Handle



- Insert the T-handle into the top cylinder of the exposed pump rod.

## Step 5



- Loosen the 2 bolts on either side of handle.

*(i)* It is not necessary to remove the bolt at this time; however, take caution to not let the bolt fall out of the handle.

## Step 6



- Loosen the 2 bolts on either side of the head to remove the handle from the pump rod.

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## Step 7



- Lift the handle to a horizontal position.

## Step 8



- While one person lifts up on the T-handle, remove the bolt and connection pieces.

## Step 9



- Remove the bolt and connection pieces from the handle.
- ⓘ Set the bolt pieces in a sanitary place, such as a bucket, to prevent contamination.

## Step 10



- Remove the handle from the pump.
- ⓘ Be sure to set the handle in a sanitary place to prevent contamination.

## Step 11 — Pump Rod



- Grab firmly on the T-handle and lift the pump rod straight up.
- Expose the first connection of the pump rod, and support the portion below the connection.

## Step 12



- While holding the pump rod below the first connection tightly, lower the first portion of the rod to a horizontal position.

## Step 13



- Unhook the first connection by pushing it out and down, then pulling it away from the rest of the rod.

## Step 14



- Repeat steps 11-13 for the remaining sections of pump rod.
- Be sure to set the pump rod segments above the ground to avoid contamination.

## Step 15 — Tank



- Place one wrench on the top side of the top base of the tank spout.
- Place another wrench on the underside of the bolt in order to get more leverage.
- Pull the top wrench to the right, and the bottom wrench to the left.

## Step 16



- Remove the loosened bolt from the pump.
- Repeat this procedure for the 3 remaining bolts.

## Step 17



- Lift the tank straight up to remove it from the pump.
- Be sure to place the tank in a sanitary place to prevent contamination.

## Step 18 — Afridev Casing Pipe Disassembly



- Slightly twist the head flange until the corners overhang the top of the tank, far enough so that you can grab them.

## Step 19



- Lift the top plate to expose the casing pipe.
- ① Place a piece of wood or brick underneath the top plate to hold it in place.

## Step 20



- Untie knots from the flange, holding on to the loose ends of the rope.

## Step 21



- With two people holding each end of the rope, remove the support underneath the top plate and lower the plate.
- This may require a bit of force, since the plate may be attached tightly.

## Step 22



- Lift the casing from the borehole, simultaneously pulling up on the ropes to support the casing.

## Step 23



- Slip a casing support over the casing.

## Step 24



- Continue lifting the casing, supporting the top portion with the casing support, as needed.

## Step 25



- When you reach the portion of the casing that needs to be repaired, tie the casing support ropes onto the frame.

## Step 26



- While supporting the casing, make the necessary repairs to the casing pipe.

To reassemble your device, follow these instructions in reverse order.